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EXAMINER	
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3663	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/828,462	MATSUMOTO ET AL.	
	Examiner	Art Unit	
	Ronnie Mancho	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *2/6/07; 7/19/07*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 6-17* is/are pending in the application.

4a) Of the above claim(s) *1,4,5,14,16 and 17* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2,3,6-13 and 15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of species A1 in the reply filed on 7/19/06 is acknowledged. Claims 2, 3, 6-15 read on the species and are presented for prosecution.

2. Claims 1, 14, 16, 17 are withdrawn and 4, 5 cancelled from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/19/07.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 2, 3, 6-15 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In claim 2, the limitation, "a third state" is defined as a state where the host vehicle is traveling on irregularities formed on a lane marking. It is further noted that in the claimed "third state" the irregularities on the lane marking are detected. Therefore, a detection of irregularities implies that the lane marking is also detected. In the last paragraph of the claim, applicant indicates that the third state is a state where the lane marking is not detected. Therefore, the claim limitations are contradictory and thus not enabled.

The rest of the claims are rejected for depending on a rejected base claim.

5. Claims 2, 3, 6-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 2, the limitation, "the first state has a stronger tendency for the host vehicle to deviate from the driving lane *than* the second state" is new matter because the limitation was not in the original claim. That is there was no comparison between a first and second state in the original disclosure. Applicant's original disclosure mentions an "increase tendency" and "a less tendency". There was no comparison between the two disclosed tendencies.

Further, the limitation, "a detection of the first state or second state *when a transition occurs fr*om a lane-marking detecting state to a lane marking non-detecting state" is new matter. That is applicant's original disclose did not show a first or second state corresponding to ".....*when a transition occurs* from a lane-marking detecting state to a lane marking non-detecting state". Instead, as originally disclosed, the first state corresponds to an increased tendency for the vehicle to deviate from the driving lane and the second state corresponds to a less tendency for the vehicle to deviate from the driving lane.

The rest of the claims are rejected for depending on a rejected base claim.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2, 3, 6-15 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 2 and 15, it is not clear what all is meant and encompassed by the phrase, "a stronger tendency". Applicant does not provide the requisite degree necessary for determining the strength of the limitation "tendency". The phrase is indefinite.

Further, in claim 2, last few lines, the limitation, "in a lane marking non-detection state where the lane marking line is out of an image pick-up enabling area" is confusing. In the first few lines of claim 2, the applicant recites that lane deviation prevention is accomplished using a The claimed "first state.....tendency" and "second state.....tendency" are not distinctly defined in the disclosure. Applicant merely copies the limitation from the specification and pastes it in the claims without providing the definition thereof.

Further in claim 2, there is no antecedent for, "non-detecting state".

In claim 6, it is not clear what all is meant and encompassed by "a constant time period". What is the distinction between a --time period-- and a "constant time period"? Applicant does not provide the requisite degree necessary for determining a "constant time period". Applicant merely recites that the limitation is supported for example in fig. 4B, etc. The examiner disagrees. In fig. 4B the disclosed time "t" is not constant as it changes along the time disclosed time axis.

The rest of the claims are rejected for depending on a rejected base claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 2,3, 6-13, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishikawa (5913375).

Regarding claim 2, Nishikawa et al (abstract, figs. 1-5; col. 5, lines 1-17; col. 6, lines 35-67, col. 7, lines 10-67) disclose an automotive lane deviation prevention (LDP) apparatus comprising:

a lane marking detector 10 (figs. 1&3; col. 7, lines 15-24) configured to detect a lane marking line on a driving lane (col. 7, lines 56-62) of a host vehicle, based on a picture image in front of the host vehicle;

an actuator 34 (fig. 3) capable of variably adjusting a yawing motion of the host vehicle (turning force on the steering is adjusted thus adjusting yaw; col. 6, lines 67 to col. 7, line 30; col. 8, lines 63 to col. 9, line 10);

a control unit (60, fig. 3) configured to be electronically connected to the lane marking detector 10 (figs. 1& 3; col. 6, lines 35-39) and the actuator (34, fig. 3) for vehicle yawing motion control (col. 7, lines 41-55) and LDP control purposes (see abstract; col. 6, lines 67 to col. 7, line 30; col. 8, lines 63 to col. 9, line 10); the control unit 60 comprising:

(a) a lane-deviation tendency detection section (CPU 1) that determines (col. 7, lines 55-67), based on a detection result regarding the lane marking line, whether the host vehicle is in a first state ($\Delta L > L$) or second state ($\Delta L < L$), wherein the first state has a stronger tendency for the host vehicle to deviate from the driving lane than the second state (i.e. if $\Delta L > L$, the vehicle has a stronger tendency to deviate and thus deviates from the lane; on the other hand, if $\Delta L < L$ there is less tendency to deviate from a lane).

(b) an LDP control section (CPU1, CPU 2, abstract, col. 8, lines 1-11, 39-58) that executes the LDP control by which the host vehicle's lane deviation tendency is avoided, when the host vehicle is in the first state (col. 8, lines 53-58);

(c) a road-surface irregularities detection section 10 (the camera takes images of the road ahead and thus determines road irregularities) configured to determine whether the host vehicle is in a third state where the host vehicle is traveling on predetermined irregularities formed on or close to the lane marking line (irregularities as disclosed by the applicant are the discontinuities in the road lane marker, these are inherent because there are discontinuities in lane markers laid on a road, applicant may refer to the provided references that disclose the structure of lane markers); and

(d) a vehicle yawing motion control section (CPU 1, CPU 2; adjust the turning force on the steering hence adjusting yaw; col. 7, lines 41-55; col. 8, lines 3-67) configured to execute yawing motion control by which the host vehicle returns to the driving lane (col. 8, lines 53-58), based on a detection of the third state in a lane-marking detecting state where the lane marking is recognized or detected by the lane marking detector, and a detection of the first state or second state when a transition occurs from a lane-marking detecting state to a lane marking non-

detecting state (i.e. when the vehicle is deviating from a lane, it detects a lane marking line, the vehicle yaw is controlled by steering input to steer the vehicle back into the desired path when the camera is focused straight ahead wherein the lane markers are not detected because the lane markers are out of an image pick-up area . In another scenario, when the system is turned on, the camera detects the lane and then at steps 3 and 4 of fig. 4, when the system is turned off or terminated, the camera no longer detects the lanes; thus the system has transitioned from a lane detection state to a lane non-detection state).

Regarding claim 3, Nishikawa et al (abstract, figs. 1-5; col. 5, lines 1-17; col. 6, lines 35-67, col. 7, lines 10-67) disclose the automotive lane deviation prevention apparatus as claimed in claim 2, wherein: the vehicle yawing motion control section maintains a controlled variable of the LDP control at a previous value of the controlled variable for a predetermined time period based on the detection of the first state when the transition from the lane-marking detecting to the lane-marking non-detecting state (controlled variable is maintained at 50MPH during and after the transition from the lane marking detection state to the lane marking non detection state; col. 8, lines 31-46).

Regarding claim 6, Nishikawa et al (abstract, figs. 1-5; col. 5, lines 1-17; col. 6, lines 35-67, col. 7, lines 10-67) disclose the automotive lane deviation prevention apparatus as claimed in either one of claim 2, further comprising: wheel speed sensors that detect respective wheel speeds of road wheels of the host vehicle, wherein the road-surface irregularities detection section determines that the host vehicle is in the third state, when at least one of the wheel speeds detected by the wheel speed sensors is fluctuating at a substantially constant time period determined based on a host vehicle speed.

Regarding claim 7, Nishikawa et al (abstract, figs. 1-5; col. 5, lines 1-17; col. 6, lines 35-67, col. 7, lines 10-67) disclose the automotive lane deviation prevention apparatus as claimed in claim 6, wherein: the road-surface irregularities detection section determines that the host vehicle is in the third state, only when either one of the left and right wheel speeds is fluctuating.

Regarding claim 8, Nishikawa et al (abstract, figs. 1-5; col. 5, lines 1-17; col. 6, lines 35-67, col. 7, lines 10-67) disclose the automotive lane deviation prevention apparatus as claimed in claim 2, further comprising: a vehicle-suspension up-and-down motion sensor that detects an up-and-down motion of a suspension of the host vehicle, wherein the road-surface irregularities detection section determines, based on the suspension's up-and-down motion detected, whether the host vehicle is in the third state.

Regarding claim 9, Nishikawa et al (abstract, figs. 1-5; col. 5, lines 1-17; col. 6, lines 35-67, col. 7, lines 10-67) disclose the automotive lane deviation prevention apparatus as claimed in either one of claim 2, wherein: the control unit further comprises a processor programmed to perform the following, (1) determining whether the host vehicle is traveling within an area except road-ways; and (2) inhibiting a check for the host vehicle traveling on the predetermined irregularities, when the host vehicle is traveling within the area except road-ways.

Regarding claim 10, Nishikawa et al (abstract, figs. 1-5; col. 5, lines 1-17; col. 6, lines 35-67, col. 7, lines 10-67) disclose the automotive lane deviation prevention apparatus as claimed in claim 2, wherein: the control unit further comprises a traveling-path condition detector that detects a host vehicle speed, a host vehicle's yaw angle with respect to a direction of the host vehicle's driving lane, a host vehicle's lateral displacement from a central axis of the host vehicle's driving lane, and a curvature of the host vehicle's driving lane; the lane-deviation

tendency detection section calculates a future lateral-displacement estimate based on the host vehicle speed, the yaw angle, the lateral displacement, and the curvature; and the lane-deviation tendency detection section determines that the host vehicle is in the first state, when an absolute value of the future lateral-displacement estimate is greater than or equal to a predetermined lateral-displacement criterion.

Regarding claim 11, Nishikawa et al (abstract, figs. 1-5; col. 5, lines 1-17; col. 6, lines 35-67, col. 7, lines 10-67) disclose the automotive lane deviation prevention apparatus as claimed in claim 2, wherein: the LDP control section controls a braking force of each of the road wheels so that a yaw moment is produced in a direction in which the host vehicle's lane-deviation tendency is avoided, when the lane-deviation tendency detection section determines that the host vehicle is in the first state.

Regarding claim 12, Nishikawa et al (abstract, figs. 1-5; col. 5, lines 1-17; col. 6, lines 35-67, col. 7, lines 10-67) disclose the automotive lane deviation prevention apparatus as claimed in claim 11, wherein: the LDP control section calculates a braking/driving force controlled variable of each of the road wheels so that a yaw moment is produced in a direction in which the host vehicle's lane-deviation tendency is avoided, when the lane-deviation tendency detection section determines that the host vehicle is in the first state; and the LDP control section controls braking/driving forces of the road wheels, responsively to the braking/driving force controlled variables calculated.

Regarding claim 13, Nishikawa et al (abstract, figs. 1-5; col. 5, lines 1-17; col. 6, lines 35-67, col. 7, lines 10-67) disclose the automotive lane deviation prevention apparatus as claimed in claim 12, wherein: the LDP control section calculates, based on a difference between

the future lane-displacement estimate and the predetermined lane-displacement criterion, a desired yaw moment to be exerted on the host vehicle; and the LDP control section calculates, based on the desired yaw moment, the braking/driving force controlled variable of each of the road wheels.

Regarding claim 15, Nishikawa et al (abstract, figs. 1-5; col. 5, lines 1-17; col. 6, lines 35-67, col. 7, lines 10-67) disclose an automotive lane deviation prevention (LDP) apparatus comprising:

a lane marking detection means 10 (figs. 1&3; col. 7, lines 15-24) for detecting a lane marking line on a driving lane (col. 7, lines 56-62) of a host vehicle, based on a picture image in front of the host vehicle;

a yaw motion control actuator 34 (fig. 3) capable of variably adjusting a yawing motion of the host vehicle (turning force on the steering is adjusted thus adjusting yaw; col. 6, lines 67 to col. 7, line 30; col. 8, lines 63 to col. 9, line 10);

a control unit (60, fig. 3) configured to be electronically connected to the lane marking detection means 10 (figs. 1& 3; col. 6, lines 35-39) and the yaw motion control actuator (34, fig. 3) for vehicle yawing motion control (col. 7, lines 41-55) and LDP control purposes (see abstract; col. 6, lines 67 to col. 7, line 30; col. 8, lines 63 to col. 9, line 10); the control unit 60 comprising:

(a) a lane-deviation tendency detection means (CPU 1) for determining (col. 7, lines 55-67), based on a detection result regarding the lane marking line, whether the host vehicle is in a first state ($\Delta L > L$) or second state ($\Delta L < L$), wherein the first state has a stronger tendency for the host vehicle to deviate from the driving lane than the second state (i.e. if $\Delta L > L$, the vehicle

has a stronger tendency to deviate and thus deviates from the lane; on the other hand, if $\Delta L < L$ there is less tendency to deviate from a lane).

(b) an LDP control means (CPU1, CPU 2, abstract, col. 8, lines 1-11, 39-58) for executing the LDP control by which the host vehicle's lane deviation tendency is avoided, when the host vehicle is in the first state (col. 8, lines 53-58);

(c) a road-surface irregularities detection means 10 (the camera takes images of the road ahead and thus determines road irregularities) for determining whether the host vehicle is in a third state where the host vehicle is traveling on predetermined irregularities formed on or close to the lane marking line (irregularities as disclosed by the applicant are the discontinuities in the road lane marker, these are inherent because there are discontinuities in lane markers laid on a road, applicant may refer to the provided references that disclose the structure of lane markers); and

(d) vehicle yawing motion control means (CPU 1, CPU 2; adjust the turning force on the steering hence adjusting yaw; col. 7, lines 41-55; col. 8, lines 3-67) for executing yawing motion control by which the host vehicle returns to the driving lane (col. 8, lines 53-58), based on a detection of the third state in a lane-marking detecting state where the lane marking is recognized or detected by the lane marking detection means, and a detection of the first state or the second state when a transition occurs from a lane-marking detecting state to a lane marking non-detecting state (i.e. when the vehicle is deviating from a lane, it detects a lane marking line, the vehicle yaw is controlled by steering input to steer the vehicle back into the desired path when the camera is focused straight ahead wherein the lane markers are not detected because the lane markers are out of an image pick-up area . In another scenario, when the system is turned on, the

camera detects the lane and then at steps 3 and 4 of fig. 4, when the system is turned off or terminated, the camera no longer detects the lanes; thus the system has transitioned from a lane detection state to a lane non-detection state).

MPEP 2114

In claims 2 and 15, the statement of intended use or field of use, "capable of variably adjusting a" is essentially a method limitation or statement of intended or desired use. Thus, the claim as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference.

The prior art anticipate the structural limitations in the apparatus claims. Even if the prior art did not perform the method limitations recited in the apparatus claims, which the examiner is not conceding, it is believed that the structural arrangement in the prior art is capable of performing the method limitation recited in the apparatus claims. To overcome MPEP 2114, the applicant may change "capable of" to --configured to--.

Response to Arguments

10. Applicant's arguments filed 2/6/07 and 7/19/07 have been fully considered but they are all not persuasive.

The 112 rejection drawn to "road surface irregularities" in claim 2 has been withdrawn.

Applicant's argument drawn to, "fourth and fifth states" are moot since the limitations have been deleted from the claims.

Applicant's argument drawn to claim 6 is not convincing. The examiner notes that it is not clear what all is meant and encompassed by "a constant time period". What is the distinction between a --time period-- and a "constant time period"? Applicant does not provide the requisite degree necessary for determining a "constant time period". Applicant merely recites that the limitation is supported for example in fig. 4B, etc. The examiner disagrees. In fig. 4B the disclosed time "t" is not constant as it changes along the disclosed time axis. Applicant argues that the claimed limitation can refer to the oscillation or wave period of a vehicle wheel speed. Fig. 4 does not show how a wheel speed is fluctuating at a substantially *constant period*. It is noted that the wheel speed as shown in fig. 4B fluctuates according to a variable time "t", it is not constant as claimed.

Applicant further argues that the prior art does not disclose the limitations in the claims. The examiner disagrees. Nishikawa et al (abstract, figs. 1-5; col. 5, lines 1-17; col. 6, lines 35-67, col. 7, lines 10-67) disclose an automotive lane deviation prevention (LDP) apparatus comprising:

a control unit (60, fig. 3) configured to be electronically connected to the lane marking detector 10 (figs. 1& 3; col. 6, lines 35-39) and the actuator (34, fig. 3) for vehicle yawing motion control (col. 7, lines 41-55) and LDP control purposes (see abstract; col. 6, lines 67 to col. 7, line 30; col. 8, lines 63 to col. 9, line 10); the control unit 60 comprising:

a lane-deviation tendency detection section (CPU 1) that determines (col. 7, lines 55-67), based on a detection result regarding the lane marking line, whether the host vehicle is in a first state ($\Delta L > L$) or second state ($\Delta L < L$), wherein the first state has a stronger tendency for the host vehicle to deviate from the driving lane than the second state (i.e. if $\Delta L > L$, the vehicle has

a stronger tendency to deviate and thus deviates from the lane; on the other hand, if $\Delta L < L$ there is less tendency to deviate from a lane).

It is further noted that the argued limitations in the claims have 112 issues (as pointed above) that need to be corrected by the applicant for example "first state .....stronger tendency than .....second state".

It is further noted that Nashikawa discloses, a road-surface irregularities detection section 10 (the camera takes images of the road ahead and thus determines road irregularities) configured to determine whether the host vehicle is in a third state where the host vehicle is traveling on predetermined irregularities formed on or close to the lane marking line. Irregularities as disclosed by the applicant are the discontinuities in the road lane marker, these are inherent because there are discontinuities in lane markers laid on a road, applicant may refer to the provided references e.g. that disclose the structure of lane markers.

Nashikawa uses a camera similar to applicant to detect the road ahead including irregularities or lane discontinuities as claimed. It is further noted that the prior art detects the speed of the vehicle at all times, whether the vehicle speed is changing at constant periods or not. Applicant's claimed third state is inconsistent as pointed out in the 112 rejection above. Applicant is required to correct the 112 issues as pointed out above.

The prior art, Nashikawa further anticipates a vehicle yawing motion control section (CPU 1, CPU 2; adjust the turning force on the steering hence adjusting yaw; col. 7, lines 41-55; col. 8, lines 3-67) configured to execute yawing motion control by which the host vehicle returns to the driving lane (col. 8, lines 53-58), based on a detection of the third state in a lane-marking detecting state where the lane marking is recognized or detected by the lane marking detector,

and a detection of the first state or second state when a transition occurs from a lane-marking detecting state to a lane marking non-detecting state (i.e. when the vehicle is deviating from a lane, it detects a lane marking line, the vehicle yaw is controlled by steering input to steer the vehicle back into the desired path when the camera is focused straight ahead wherein the lane markers are not detected because the lane markers are out of an image pick-up area . *In another scenario, when the system is turned on, the camera detects the lane and then at steps 3 and 4 of fig. 4, when the system is turned off or terminated, the camera no longer detects the lanes; thus the system has transitioned from a lane detection state to a lane non-detection state*).

As already pointed out, applicant at one moment indicated that the third applies to a state when the vehicle is traveling on irregularities on a lane marker thus indicating that a lane marker is detected. Later on in the claim applicant indicates that the third implies that the apparatus is in a lane marking non-detecting state. This is contradictory. Since applicant's arguments are based on this premise, it implies that the arguments are not convincing since the arguments are based on contradictory limitations.

The limitation, "a detection of the first state or second state *when a transition occurs from* a lane-marking detecting state to a lane marking non-detecting state" is new matter. That is applicant's original disclose did not show a first or second state corresponding to "……*when a transition occurs* from a lane-marking detecting state to a lane marking non-detecting state". Instead, as originally disclosed, the first state corresponds to an increased tendency for the vehicle to deviate from the driving lane and the second state corresponds to a less tendency for the vehicle to deviate from the driving lane.

Applicant's argued limitations are not supported in the original disclosure.

It is believed that the prior art anticipates the claims as pointed out in the sections above.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Communication

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronnie Mancho whose telephone number is 571-272-6984. The examiner can normally be reached on Mon-Thurs: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ronnie Mancho
Examiner
Art Unit 3663

9/28/2007

JACK KEITH
SUPERVISORY PATENT EXAMINER